

GGGGGGGGGG	LL	BBBBBBBBBB	DDDDDDDD	AAAAAA	TTTTTTTTTT
GGGGGGGGGG	LL	BBBBBBBBBB	DDDDDDDD	AAAAAA	TTTTTTTTTT
GG	LL	BB	DD	AA	TT
GG	LL	BB	DD	AA	TT
GG	LL	BB	DD	AA	TT
GG	LL	BB	DD	AA	TT
GG	LL	BBBBBBBBBB	DD	AA	TT
GG	LL	BBBBBBBBBB	DD	AA	TT
GG	GGGGGG	LL	BB	DD	AAAAAA
GG	GGGGGG	LL	BB	DD	AAAAAA
GG	GG	LL	BB	DD	AA
GG	GG	LL	BB	DD	AA
GGGGGG	LLLLLLLLLL	BBBBBBBBBB	DDDDDDDD	AA	TT
GGGGGG	LLLLLLLLLL	BBBBBBBBBB	DDDDDDDD	AA	TT

....

LL		SSSSSSSS
LL		SSSSSSSS
LL		SS
LL		SS
LL		SS
LL		SSSSSS
LL		SSSSSS
LL		SS
LLLLLLLLLL		SSSSSSSS
LLLLLLLLLL		SSSSSSSS

```
0001 0 XTITLE 'Define global literals and data structures'
0002 0 MODULE glbdat ( IDENT = 'V04-000'
0003 0 ) =
0004 1 BEGIN
0005 1
0006 1 ****
0007 1 *
0008 1 * COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
0009 1 * DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.
0010 1 * ALL RIGHTS RESERVED.
0011 1 *
0012 1 * THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED
0013 1 * ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE
0014 1 * INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER
0015 1 * COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY
0016 1 * OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY
0017 1 * TRANSFERRED.
0018 1 *
0019 1 * THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE
0020 1 * AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT
0021 1 * CORPORATION.
0022 1 *
0023 1 * DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
0024 1 * SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
0025 1 *
0026 1 *
0027 1 ****
0028 1 *
0029 1
0030 1 ++
0031 1 : FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS
0032 1 :
0033 1 : ABSTRACT: Global data definitions; contains no instructions.
0034 1 :
0035 1 : ENVIRONMENT: Transportable
0036 1 :
0037 1 : AUTHOR: R.W.Friday CREATION DATE: November, 1978
0038 1 :
```

40 0039 1 ZSBTTL 'Revision History'
41 0040 1 MODIFIED BY:
42 0041 1 041 REM00041 Ray Marshall 1-June-1984
43 0042 1 Moved XPD_APPEND back into the SAVE/RESTORE area and
44 0043 1 conditionalized it and XPD_FLAGS for DSRPLUS only. Also
45 0044 1 worked on some of the comments in that area.
46 0045 1
47 0046 1
48 0047 1 040 KFA00040 Ken Alden 17-Apr-1984
49 0048 1 For DSRPLUS:
50 0049 1 Added a semicolon to the end of the command that
51 0050 1 just precedes 'OWN'.
52 0051 1
53 0052 1 039 REM00039 Ray Marshall 16-Feb -> 15-Mar-1984
54 0053 1 Added one literal, one global variable, and two global bind
55 0054 1 structures containing filetype lists used in mapping the
56 0055 1 output filetype based on the input filetype. These items
57 0056 1 are also used when the user defaults the input filetype.
58 0057 1
59 0058 1 The literal is IPFTCT and indicates how many cells there are
60 0059 1 in the list of input filetypes in IPFTOP. There are also as
61 0060 1 many cells in the list of output filetypes in OPFTOP. The
62 0061 1 variable is IPFTYP and will contain the index into the above
63 0062 1 mentioned filetype lists.
64 0063 1
65 0064 1 Also added LFFCTX which is a global context cell used by the
66 0065 1 VMS RTL routine LIB\$FIND_FILE.
67 0066 1
68 0067 1 038 REM00038 Ray Marshall 17-November-1983
69 0068 1 Modified the external definition of ATABLE to use the new
70 0069 1 macro ATABLE_DEFINITION defined in ATCODE.REQ.
71 0070 1
72 0071 1 037 REM00037 Ray Marshall 7-November-1983
73 0072 1 Doubled the size of ATABLE (added another 128 cells) to support
74 0073 1 the DEC multinational character set. Also, changed it to a
75 0074 1 BYTE VECTOR.
76 0075 1
77 0076 1 036 KFA00036 Ken Alden 30-Sep-1983
78 0077 1 Moved items around for save/restore fix.
79 0078 1
80 0079 1 035 REM00035 Ray Marshall 22-Jul-1983
81 0080 1 Conditionalized TEMP_SIZE_MRA for DSRPLUS only.
82 0081 1
83 0082 1 034 REM00034 Ray Marshall 22-Jul-1983
84 0083 1 Changed TEMP_MRA_SIZE to TEMP_SIZE_MRA so that it will be
85 0084 1 unique within the first 6 characters for the TOPS-20 Linker.
86 0085 1 Added KWTCBR for future addition of cross-book cross-reference
87 0086 1 support.
88 0087 1
89 0088 1 033 RER00033 Ron Randall 9-Jun-1983
90 0089 1 For DSRPLUS:
91 0090 1 Added flag to indicate when GETNUM is processing an entity.
92 0091 1
93 0092 1 032 RER00032 Ron Randall 11-May-1983
94 0093 1 For DSRPLUS:
95 0094 1 Added general-purpose temporary and hold mra and tsf.
96 0095 1

97 0096 1 031 KAD00031 Keith Dawson 9-May-1983
98 0097 1 Remove support for .DX, .PX.
99 0098 1
100 0099 1 030 KFA00030 Ken Alden 14-Apr-1983
101 0100 1 Alter headerlevel, pagesize to hyphenated strings.
102 0101 1
103 0102 1 029 KAD00029 Keith Dawson 13-Apr-1983
104 0103 1 Added omitted DSRPLUS conditional on Skeyword_tables.
105 0104 1
106 0105 1 028 RER00028 Ron Randall 06-Apr-1983
107 0106 1 For DSRPLUS:
108 0107 1 Added secondary topnote IOBs and footnote numbering variables.
109 0108 1
110 0109 1 027 REM00027 Ray Marshall 06-Apr-1983
111 0110 1 Fix misspelled literal in a keyword table definition.
112 0111 1
113 0112 1 026 REM00023 Ray Marshall Mar-1983
114 0113 1 Added KWTRPN, KWTUDM, KWTPDM, & KWTPDP keyword table listheads.
115 0114 1 Also built the predefined keyword table entries.
116 0115 1
117 0116 1 025 RER00025 Ron Randall 20-Mar-1983
118 0117 1 Fine tuning of topnote globals.
119 0118 1 Deleted passthrough flag.
120 0119 1
121 0120 1 024 KAD00024 Keith Dawson 20-Mar-1983
122 0121 1 Removed LN01 conditionals and all references to .BIX
123 0122 1 and .BTC files.
124 0123 1
125 0124 1 023 RER00023 Ron Randall 19-Mar-1983
126 0125 1 For DSRPLUS: Added definitions related to topnotes.
127 0126 1
128 0127 1 022 KFA00022 Ken Alden 18-Mar-1983
129 0128 1 Changes made were to make SAVE/RESTORE related globals
130 0129 1 visible to DSR.
131 0130 1
132 0131 1 021 KAD00021 Keith Dawson 07-Mar-1983
133 0132 1 Global edit of all modules. Updated module names, idents,
134 0133 1 copyright dates. Changed require files to BLISS library.
135 0134 1 !--
136 0135 1

```
138 0136 ; XSBTTL 'Require files and libraries'  
139 0137 ;  
140 0138 ; INCLUDE FILES:  
141 0139 ;  
142 0140 ; LIBRARY 'NXPORT:XPORT';  
143 0141 ; REQUIRE 'REQ:RNODEF';  
144 0272 ;  
145 U 0273 ; XIF DSRPLUS XTHEN  
146 U 0274 ; LIBRARY 'REQ:DPLLIB';  
147 0275 ; XELSE  
148 0276 ; LIBRARY 'REQ:DSRLIB';  
149 0277 ; XFI  
150 0278 ;  
151 0279 ;  
152 0280 ; EQUATED SYMBOLS:  
153 0281 ;  
154 0282 ; GLOBAL LITERAL  
155 0283 ; rintes = %0'34' : UNSIGNED (8), ! Runoff internal escape character.  
156 0284 ;  
157 0285 ; The global literal s_fmra is used in the module FONLY. In that  
158 0286 ; module, it is necessary to reset the MRA size explicitly. The  
159 0287 ; global literal assures that the size will be reset to the allocated  
160 0288 ; value.  
161 0289 ;  
162 0290 ; s_fmra = 500,  
163 0291 ;  
164 0292 ; tnmra_size is similarly used in the module TPNOTE.  
165 0293 ;  
166 0294 ; tnmra_size = 500,  
167 0295 ;  
168 U 0296 ; XIF DSRPLUS XTHEN  
169 U 0297 ;  
170 U 0298 ; temp_size_mra is similarly used in any module.  
171 U 0299 ;  
172 U 0300 ; temp_size_mra = 100,  
173 U 0301 ; XFI  
174 U 0302 ; ipftct = %IF dsrplus XTHEN 14; ; Number of input file types known.  
175 0303 ; XELSE 12; ; If IPFTOP & OPFTOP are changed,  
176 0304 ; XFI ; this literal may also need changing.  
177 0305 ;  
178 0306 ; OWN STORAGE:  
179 0307 ;  
180 0308 ; OWN  
181 0309 ; pp_sca : Sh_r_sca_block; ; Used in PUSH_SCA, POP_SCA macros  
182 0310 ;
```

```
184 0311 1 XSBTTL 'Global storage'
185 0312 1
186 0313 1 : GLOBAL STORAGE:
187 0314 1
188 0315 1 : GLOBAL
189 0316 1     r_cmd      : $rno_cmd;           ! Command-line information.
190 0317 1
191 0318 1 : GLOBAL
192 0319 1     ldstsf    : COUNTED_LIST,
193 0320 1     tsfa       : VECTOR [tsf_size],
194 0321 1     fs_allocate (mraa, 500),
195 0322 1     fs_allocate (fra, 500),
196 0323 1     fs_allocate (ira, 10),
197 0324 1     fs_allocate (xmra, 100),        ! Used for <INDEX flag> processing.
198 0325 1     mra,           ! Refers to MRAa or MRAb.
199 0326 1
200 0327 1 : Descriptors for title and subtitle.
201 0328 1
202 0329 1     tittsf     : VECTOR [tsf_size], ! Titles
203 0330 1     sbttsf    : VECTOR [tsf_size], ! Subtitles
204 0331 1
205 0332 1 : Storage for titles and subtitles
206 0333 1
207 0334 1     fs_allocate (titmra, max_title), ! Titles
208 0335 1     fs_allocate (sbtmra, max_title), ! Subtitles
209 0336 1
210 0337 1     xtsf       : VECTOR [tsf_size], ! Used for <INDEX flag> processing.
211 0338 1     khar,           ! Character storage
212 0339 1
213 0340 1 :+ This is the beginning of the SAVE/RESTORE area ****
214 0341 1
215 0342 1 : ANY changes in this area should be reflected in SAVE.REQ as well.
216 0343 1
217 0344 1     flgt      : flag_table [flag_count],
218 0345 1     ttable    : COUNTED_LIST [max_tabs], ! Tab settings
219 0346 1
220 0347 1 : The following definition macro is defined in ATCODE.REQ to be [256, BYTE].
221 0348 1
222 0349 1     atable    : atable_definition, ! Action table. Used to identify
223 0350 1
224 0351 1     what type of action is to be taken
225 0352 1     pdtstf   : VECTOR [pdt_size],
226 0353 1     save      : $save_block,        ! on encountering any given character.
227 0354 1
228 0355 1 :+ This marks the end of the SAVE block.
229 0356 1
230 0357 1 : Below is the additional area for SAVE ALL.
231 0358 1
232 0359 1     saveall   : $saveall_block, ! This area holds more items saved
233 0360 1
234 0361 1     only during a .SAVE ALL
235 0362 1     dattim    : VECTOR [6],      ! Day and time pieces.
236 0363 1     hllist    : COUNTED_LIST [max_levels],
237 0364 1     ecc       : $ecc_blockvector, ! Entity counter / caption area.
238 0365 1
239 0366 1 :+ DSRPLUS XTHEN
240 0367 1
U 0364 1 : These DSRPLUS structures are updated by setting the default
U 0365 1 : XPLUS attributes, .ENABLE XPLUS (attr,...).
```

```

241 U 0368 1 !
242 U 0369 1 xpd_flags, ! Default attributes flags.
243 U 0370 1 fs_allocate (xpd_append, xp_string_size), ! Default APPEND = string.
244 U 0371 1 !+
245 U 0372 1 !+
246 U 0373 1 !+ This is the end of the SAVE/RESTORE area ****
247 U 0374 1 !-
248 U 0375 1 !- savstk : savstack, ! Storage for the save/restore list.
249 U 0376 1
250 U 0377 1 XIF DSRPLUS XTHEN
251 U 0378 1
252 U 0379 1 Topnote related globals.
253 U 0380 1
254 U 0381 1 topnot : tn_definition, ! Topnote control table.
255 U 0382 1 tnrec : tnrec_definition, ! Topnote file record control area.
256 U 0383 1 tnilob : REF $XPO_IOB (), Internal topnote IOB.
257 U 0384 1 tnulob : REF $XPO_IOB (), ! User topnote IOB.
258 U 0385 1 tn0lob : $XPO_IOB (), ! Save area for paragraph stuff.
259 U 0386 1 tn1lob : $XPO_IOB (), ! Save area for SCA.
260 U 0387 1 tnpdt : VECTOR [pdt_size], ! Substitute TSF.
261 U 0388 1 tnsca : VECTOR [sca_size], ! Substitute TSF.
262 U 0389 1 tntsf : VECTOR [tsf_size], ! Substitute TSF.
263 U 0390 1 tnhdd,
264 U 0391 1 tnhlch,
265 U 0392 1 tnhlsc,
266 U 0393 1 tnhlsk,
267 U 0394 1 tnhlst,
268 U 0395 1 tnhmra,
269 U 0396 1 tnhpdt,
270 U 0397 1 tnhrch,
271 U 0398 1 tnhtsf,
272 U 0399 1 fs_allocate (tnmra, tnmra_size),
273 U 0400 1 tn_ldd : VECTOR [3], ! Substitute display descriptor.
274 U 0401 1 tn_lchr : VECTOR [3], ! Substitute .LIST bullet char.
275 U 0402 1 tn_list : COUNTED_LIST [3], ! Substitute .LIST counters
276 U 0403 1 tn_llchr : VECTOR [3], ! Substitute left character
277 U 0404 1 tn_lrchr : VECTOR [3], ! Substitute right character
278 U 0405 1 tn_lskp : VECTOR [3], ! Substitute .LIST el spacing.
279 U 0406 1
280 U 0407 1 Footnote numbering variables.
281 U 0408 1
282 U 0409 1 l_character,
283 U 0410 1 r_character,
284 U 0411 1
285 U 0412 1 The following structures are updated each time the
286 U 0413 1 ATTRIB routine is called.
287 U 0414 1
288 U 0415 1 xp_flags, ! Working attributes flags
289 U 0416 1 fs_allocate (xp_append, xp_string_size), ! Working APPEND = string
290 U 0417 1 fs_allocate (xp_sort, xp_string_size), ! Working SORT = string
291 U 0418 1
292 U 0419 1 General-purpose mra and tsf substitution aids.
293 U 0420 1
294 U 0421 1 hold_mra, ! Holds MRA address.
295 U 0422 1 fs_allocate (temp_mra, temp_size_mra), ! Substitute MRA.
296 U 0423 1 hold_tsf, ! Holds TSF address.
297 U 0424 1 temp_tsf : VECTOR [tsf_size], ! Substitute TSF.

```

```

298 U 0425 1
299 U 0426 1 | Flag to indicate when GETNUM is processing a $ or $$ entity.
300 U 0427 1
301 U 0428 1 | processing entity.
302 U 0429 1 | entity_in_Tootnote.
303 U 0430 1 ZFI
304 U 0431 1
305 U 0432 1 tsf : REF VECTOR [tsf_size], ! Refers to TSFa or TSFb.
306 U 0433 1 fnesiz : fn_ext_size_definition, ! Sizes of pending footnotes.
307 U 0434 1 fnisiz : fn_int_size_definition, ! Number of TSF/MRA pairs in
308 U 0435 1 each pending footnote.
309 U 0436 1 fnct : fnct_definition, ! Footnote control table.
310 U 0437 1 gca : gca_definition, ! Global control area.
311 U 0438 1 hct : hct_definition, ! Header control area.
312 U 0439 1 ifstk : ifstack, ! Stack for .IFs, and so on.
313 U 0440 1 fohlch,
314 U 0441 1 fohrch,
315 U 0442 1 fohdd,
316 U 0443 1 fohlsc,
317 U 0444 1 fohlsk,
318 U 0445 1 fohlst,
319 U 0446 1 fohpdt,
320 U 0447 1 fohmra,
321 U 0448 1 fohtsf,
322 U 0449 1 foorec : foorec_definition,
323 U 0450 1 fs_allocate (foomra, s_fmra).

324 U 0451 1
325 U 0452 1 | NOTE: An RSX IOB gets 80 (120 octal) words allocated to it.
326 U 0453 1
327 U 0454 1 fooiob : REF SXPO_IOB (), ! Used for processing footnotes.
328 U 0455 1 fotiob : REF SXPO_IOB (),
329 U 0456 1 fo1iob : SXPO_IOB (),
330 U 0457 1 fo2iob : SXPO_IOB (),
331 U 0458 1 foopdt : VECTOR [pdt_size],
332 U 0459 1 foosca : VECTOR [sca_size],
333 U 0460 1 f-list : COUNTED LIST [3],
334 U 0461 1 f-lchr : VECTOR [3],
335 U 0462 1 f-lskp : VECTOR [3],
336 U 0463 1 f-llchr : VECTOR [3],
337 U 0464 1 f-lrchr : VECTOR [3],
338 U 0465 1 f-ldd : VECTOR [3],
339 U 0466 1 footsf : VECTOR [tsf_size],
340 U 0467 1 irac : irac_definition,
341 U 0468 1 npagen : page_definition, ! Page number of next page
342 U 0469 1 spager : BLOCK [max_page_ranges * page_sct_size], ! List of starting pages
343 U 0470 1 tpager : BLOCK [max_page_ranges * page_sct_size], ! List of terminating pages.
344 U 0471 1 pagen : page_definition, ! Page number of current page
345 U 0472 1 brnoob : SXPO_IOB (),
346 U 0473 1 brniob : SXPO_IOB (),
347 U 0474 1 ndxpol : INITIAL (0),
348 U 0475 1 ndxsge : INITIAL (0),
349 U 0476 1 ndxsgf : INITIAL (0),
350 U 0477 1 xtncnt,
351 U 0478 1 xtnlsp : INITIAL (0),
352 U 0479 1 xtnlsx : INITIAL (0),
353 U 0480 1 xtnpol : INITIAL (0),
354 U 0481 1 xtnsgp : INITIAL (0),

```

```

355 0482 1 :: xtntab : REF xtntab_define,
356 0483 1 :: xpagen : REF xpagen_define,
357 0484 1 :: sca : sca_definition,
358 0485 1 :: scalit : VECTOR [sca_case_size],
359 0486 1 :: numprm : numprm_define,
360 0487 1 :: fs_allocate (fs01, 150),
361 0488 1 :: outopt : outopt_define,
362 0489 1 :: frmstd, : frmstd,
363 0490 1 :: frmstk : frmstk,
364 0491 1 :: hlc : hlc_definition,
365 0492 1 :: hldsp : VECTOR [max_levels],
366 0493 1 :: lstchr : lstchr,
367 0494 1 :: lstlch : lstlch,
368 0495 1 :: lstrch : lstrch,
369 0496 1 :: lstldd : lstldd,
370 0497 1 :: lstcnt : lstcnt,
371 0498 1 :: lstskp : lstskp,
372 0499 1 :: lchlst : lchlst,
373 0500 1 :: rchlst : rchlst,
374 0501 1 :: lddlst : lddlst,
375 0502 1 :: chlst : chlst,
376 0503 1 :: nmilst : nmilst,
377 0504 1 :: nmilst : nmilst,
378 0505 1 :: nmilst : nmilst,
379 0506 1 :: pdt : pdt,
380 0507 1 :: phan : phan,
381 0508 1 :: skplst : skplst,
382 0509 1 :: iobstk : iobstk,
383 0510 1 :: iobstk : iobstk,
384 0511 1 :: Active input file IOBs saved in IOBSTK.
385 0512 1 :: Active input file IOBs saved in IOBSTK.
386 0513 1 :: rneiob : REF $XPO_IOB (),
387 0514 1 :: rnaeob : REF $XPO_IOB (),
388 0515 1 :: rniiob : REF $XPO_IOB (),
389 0516 1 :: rnoiob : REF $XPO_IOB (),
390 0517 1 :: tteiob : $XPO_IOB (),
391 0518 1 :: ttiiob : $XPO_IOB (),
392 0519 1 :: ttoiob : $XPO_IOB (),
393 0520 1 :: tsiiob : $XPO_IOB (),
394 0521 1 :: tsiiob : $XPO_IOB (),
395 0522 1 :: tsiiob : $XPO_IOB (),
396 0523 1 :: tsiiob : $XPO_IOB (),
397 0524 1 :: Declare a string descriptor that will point to the "resultant" file
398 0525 1 :: name string when any file operation fails.
399 0526 1 :: ffname : $STR_DESCRIPTOR (CLASS = DYNAMIC),
400 0527 1 :: ffname : $STR_DESCRIPTOR (CLASS = DYNAMIC),
401 0528 1 :: ffname : $STR_DESCRIPTOR (CLASS = DYNAMIC),
402 0529 1 :: ffname : $STR_DESCRIPTOR (CLASS = DYNAMIC),
403 0530 1 :: ffname : $STR_DESCRIPTOR (CLASS = DYNAMIC),
404 0531 1 :: ffname : $STR_DESCRIPTOR (CLASS = DYNAMIC),
405 0532 1 :: ffname : $STR_DESCRIPTOR (CLASS = DYNAMIC),
406 0533 1 :: ffname : $STR_DESCRIPTOR (CLASS = DYNAMIC),
407 0534 1 :: semcod,
408 0535 1 :: vrcnt, : vrcnt,
409 0536 1 :: vrname : vrname_def,
410 0537 1 :: vrlnq : vrlnq_def,
411 0538 1 :: vrbool : vrbool_def,
```

List of transaction numbers assigned
 Page number associated with transaction number.
 Scanner control area.
 ! Save case rules here during literal
 processing.
 Work area.
 General purpose character string
 work area.
 Output options.
 Depth of FRMSTK (0 means empty).

Storage for primary input IOB.
 Storage for output IOB.
 Input IOB currently active.
 Output file IOB
 (i.e., for generated document).
 Standard error file (usually TTY:).
 Standard input file (usually TTY:).
 Standard output file (usually TTY:).
 Standard input file; but STREAM,
 not RECORD.

Declare a string descriptor that will point to the "resultant" file
 name string when any file operation fails.

Number of variables.
 The variable names.
 The length of the names.
 TRUE/FALSE value.

```

412 0539 1 vrf_flg : vrf_flg_def,
413 0540 1 vrt_flg : vrt_flg_def,
414 0541 1 vrsrc : vrsrc_def,
415 0542 1
416 0543 1 XIF XBLISS (BLISS32) XTHEN
417 0544 1 lffctx. ! Global context cell used by LIBSFIND_FILE
418 0545 1 XFI
419 0546 1 ipftyp: ! Will contain the index into the following table which
420 0547 1 ! identifies what the input file's extension field is.
421 0548 1
422 0549 1 The following two lists of file types determine which output file type
423 0550 1 results from an input file type. The two lists must remain in order since
424 0551 1 translation is done by searching down one list and using the computed index
425 0552 1 to fetch the result from the other list. They are used in RUNOFF.BLI for
426 0553 1 the VMS implementation and CLH.BLI for the TOPS-20 implementation.
427 0554 1
428 0555 1 IPFTCT (above) must indicate the length of each table.
429 0556 1
430 0557 1 GLOBAL BIND
431 0558 1 ipftop = PLIT ( ! InPut File Type OPtions
432 0559 1
433 0560 1 CHSPTR(UPLIT('.RNO')), !Produces .MEM
434 0561 1 XIF DSRPLUS XTHEN
435 0562 1 CHSPTR(UPLIT('.RTB')), !Produces .MET
436 0563 1 XFI
437 0564 1 CHSPTR(UPLIT('.RNT')), !Produces .MEC
438 0565 1 CHSPTR(UPLIT('.RNX')), !Produces .MEX
439 0566 1 CHSPTR(UPLIT('.RND')), !Produces .DOC
440 0567 1 CHSPTR(UPLIT('.RNH')), !Produces .HLP
441 0568 1 CHSPTR(UPLIT('.RNB')), !Produces .BLB
442 0569 1 CHSPTR(UPLIT('.RNC')), !Produces .CCO
443 0570 1 CHSPTR(UPLIT('.RNE')), !Produces .ERR
444 0571 1 CHSPTR(UPLIT('.RNL')), !Produces .PLM
445 0572 1 CHSPTR(UPLIT('.RNM')), !Produces .MAN
446 0573 1 CHSPTR(UPLIT('.RNP')), !Produces .OPR
447 0574 1 CHSPTR(UPLIT('.RNS')) !Produces .STD
448 0575 1 XIF DSRPLUS XTHEN,
449 0576 1 CHSPTR(UPLIT('.***')) !Wild card file extension
450 0577 1 XFI
451 0578 1
452 0579 1
453 0580 1 opftop = PLIT ( ! OutPut File Type OPtions
454 0581 1
455 0582 1 CHSPTR(UPLIT('.MEM')), !From .RNO
456 0583 1 XIF DSRPLUS XTHEN
457 0584 1 CHSPTR(UPLIT('.MET')), !From .RTB
458 0585 1 XFI
459 0586 1 CHSPTR(UPLIT('.MEC')), !From .RNT
460 0587 1 CHSPTR(UPLIT('.MEX')), !From .RNX
461 0588 1 CHSPTR(UPLIT('.DOC')), !From .RND
462 0589 1 CHSPTR(UPLIT('.HLP')), !From .RNH
463 0590 1 CHSPTR(UPLIT('.BLB')), !From .RNB
464 0591 1 CHSPTR(UPLIT('.CCO')), !From .RNC
465 0592 1 CHSPTR(UPLIT('.ERR')), !From .RNE
466 0593 1 CHSPTR(UPLIT('.PLM')), !From .PNL
467 0594 1 CHSPTR(UPLIT('.MAN')), !From .RNM
468 0595 1 CHSPTR(UPLIT('.OPR')), !From .RNP

```

```

: 469      0596 1
: 470      U 0597 1 %IF DSRPLUS %THEN,  CHSPTR(UPLIT('.STD')) !From .RNS
: 471      U 0598 1
: 472      U 0599 1 %F1
: 473      0600 1
: 474      U 0601 1 %IF DSRPLUS %THEN
: 475      U 0602 1 ! Various keyword table listheads.
: 476      U 0603 1 GLOBAL
: 477      U 0604 1     kwtrpn,           ! .ReferencePoint Names
: 478      U 0605 1     kwtcbr,           ! Cross-Book crossReference structures
: 479      U 0606 1     kwtudm;          ! User Defined Macros (counter variable names)
: 480      U 0607 1
: 481      U 0608 1 Skeyword_table (kwtpdm, G, ! PreDefined Macros ("$$" entity names)
: 482      U 0609 1     (APPENDIX,      kw$pdः_appendix),
: 483      U 0610 1     (CHAPTER,       kw$pdः_chapter),
: 484      U 0611 1     (CURRENT_FILE, kw$pdः_current_file),
: 485      U 0612 1     (DATE,          kw$pdः_date)
: 486      U 0613 1     (EXAMPLE,       kw$pdः_example),
: 487      U 0614 1     (FIGURE,        kw$pdः_figure),
: 488      U 0615 1     (FOOTNOTE,      kw$pdः_footnote),
: 489      U 0616 1     (HEADER_LEVEL, kw$pdः_header_level),
: 490      U 0617 1     (MARGIN,        kw$pdः_margin),
: 491      U 0618 1     (MARK,          kw$pdः_mark),
: 492      U 0619 1     (PAGE,          kw$pdः_page),
: 493      U 0620 1     (PAGE_SIZE,     kw$pdः_page_size),
: 494      U 0621 1     (ROOT_FILE,     kw$pdः_root_file),
: 495      U 0622 1     (RUNNING,       kw$pdः_running),
: 496      U 0623 1     (SECTION,       kw$pdः_section),
: 497      U 0624 1     (SPACING,       kw$pdः_spacing),
: 498      U 0625 1     (TABLE,         kw$pdः_table),
: 499      U 0626 1     (TIME,          kw$pdः_time)
: 500      U 0627 1   );
: 501      U 0628 1
: 502      U 0629 1 Skeyword_table (kwtpdp, G, ! PreDefined Parameters ("$$" entity names)
: 503      U 0630 1     (DAY,           kw$pdः_day),
: 504      U 0631 1     (HOUR,          kw$pdः_hour),
: 505      U 0632 1     (LEFT,          kw$pdः_left),
: 506      U 0633 1     (LENGTH,        kw$pdः_length),
: 507      U 0634 1     (MINUTE,        kw$pdः_minute),
: 508      U 0635 1     (MONTH,          kw$pdः_month),
: 509      U 0636 1     (RIGHT,          kw$pdः_right),
: 510      U 0637 1     (SECOND,        kw$pdः_second),
: 511      U 0638 1     (WIDTH,          kw$pdः_width),
: 512      U 0639 1     (YEAR,           kw$pdः_year)
: 513      U 0640 1   );
: 514      0641 1 %F1
: 515      0642 1
: 516      0643 1 GLOBAL BIND
: 517      0644 1     fltso = PLIT (
: 518      0645 1
: 519      U 0646 1 %IF DSRPLUS %THEN
: 520      U 0647 1     NPX_FLAG,          ! <Nopermute Index flag>
: 521      0648 1 %F1
: 522      0649 1     SUB_FLAG,          ! <SUBSTITUTE flag>
: 523      0650 1     QUO_FLAG,          ! <QUOTE flag>
: 524      0651 1     UPP_FLAG,          ! <UPPERCASE flag>
: 525      0652 1     LOW_FLAG,          ! <LOWERCASE flag>

```

```

: 526 0653 1 CAP_FLAG.
: 527 0654 1 UND_FLAG.
: 528 0655 1 BLD_FLAG.
: 529 0656 1 SPA_FLAG.
: 530 0657 1 IND_FLAG.
: 531 0658 1 HYP_FLAG.
: 532 0659 1 BRK_FLAG.
: 533 0660 1 PER_FLAG.
: 534 0661 1 OVR_FLAGS
: 535 0662 1 : VECTOR;
: 536 0663 1
: 537 0664 1 END
: 538 0665 0 ELUDOM

```

```

| <CAPITALIZE flag>
| <UNDERLINE flag>
| <BOLD flag>
| <SPACE flag>
| <INDFY flag>
| <PHENATION flag>
| <BREAK flag>
| <PERIOD flag>
| <COVERSTRIKE flag>

```

! End of module.

```

.TITLE GLBDAT Define global literals and data structure
.es
.IDENT \V04-000\
.PSECT SPLITS,NOWRT,NOEXE,2

```

4F	4E	52	2E	00000	P.AAB:	.ASCII	\.RNO\
54	4E	52	2E	00004	P.AAC:	.ASCII	\.RNT\
58	4E	52	2E	00008	P.AAD:	.ASCII	\.RNX\
44	4E	52	2E	0000C	P.AAE:	.ASCII	\.RND\
48	4E	52	2E	00010	P.AAF:	.ASCII	\.RNH\
42	4E	52	2E	00014	P.AAG:	.ASCII	\.RNB\
43	4E	52	2E	00018	P.AAH:	.ASCII	\.RNC\
45	4E	52	2E	0001C	P.AAI:	.ASCII	\.RNE\
4C	4E	52	2E	00020	P.AAJ:	.ASCII	\.RNL\
4D	4E	52	2E	00024	P.AAK:	.ASCII	\.RNM\
50	4E	52	2E	00028	P.AAL:	.ASCII	\.RNP\
53	4E	52	2E	0002C	P.AAM:	.ASCII	\.RNS\

00000000: 00000000: 00000000: 00000000: 00000000: 00000000: 00034 P.AAA: .LONG 12
00000000: 00000000: 00000000: 00000000: 00000000: 00000000: 0004C .ADDRESS P.AAB, P.AAC, P.AAD, P.AAE, P.AAF, -
P.AAG, P.AAH, P.AAI, P.AAJ, P.AAK, P.AAL, -
P.AAM

4D	45	4D	2E	00064	P.AAO:	.ASCII	\.MEM\
43	45	4D	2E	00068	P.AAP:	.ASCII	\.MEC\
58	45	4D	2E	0006C	P.AAQ:	.ASCII	\.MEX\
43	4F	44	2E	00070	P.AAR:	.ASCII	\.DOC\
50	4C	48	2E	00074	P.AAS:	.ASCII	\.HLP\
42	4C	42	2E	00078	P.AAT:	.ASCII	\.BLB\
4F	43	43	2E	0007C	P.AAU:	.ASCII	\.CCO\
52	52	45	2E	00080	P.AAV:	.ASCII	\.ERR\
4D	4C	50	2E	00084	P.AAW:	.ASCII	\.PLM\
4E	41	4D	2E	00088	P.AAX:	.ASCII	\.MAN\
52	50	4F	2E	0008C	P.AAY:	.ASCII	\.OPR\
44	54	53	2E	00090	P.AAZ:	.ASCII	\.STD\

00000000: 00000000: 00000000: 00000000: 00000000: 00000000: 00094 P.AAN: .LONG 12
00000000: 00000000: 00000000: 00000000: 00000000: 00000000: 000B9 .ADDRESS P.AAO, P.AAP, P.AAQ, P.AAR, P.AAS, -
P.AAT, P.AAU, P.AAV, P.AAW, P.AAX, P.AAY, -
P.AAZ

00000007	00000006	00000005	00000004	00000003	0000000D	000C8	P.ABA: .LONG 13
0000000F	00000010	00000008	0000000A	00000009	00000000	000CC	P.ABA: .LONG 0, 3, 4, 5, 6, 7, 8, 9, 10, 11, 16, 15, 12
					00000008	000E4	
					0000000C	000FC	

				.PSECT	SOWNS,NOEXE,2
00000 PP_SCA: .BLKB				48	
				.PSECT	SGLOBALS,NOEXE,2
00000 R CMD:: .BLKB				100	
00064 LSTSTF:: .BLKB				68	
000A8 TSFA:: .BLKB				160	
00000000	000001F4	00000000	00000000	00148 MRAA:: .LONG	0 0, 500, 0
				00158 .BLKB	500
00000000	000001F4	00000000	00000000	0034C FRA:: .LONG	0 0, 500, 0
				0035C .BLKB	500
00000000	0000000A	00000000	00000000	00550 IRA:: .LONG	0 0, 10, 0
				00560 .BLKB	10
00000000	00000064	00000000	00000000	0056C XMRA:: .LONG	0 0, 100, 0
				0057C .BLKB	100
				005EQ MRA:: .BLKB	4
00000000	000001C2	00000000	00000000	005E4 TITTSF:: .BLKB	160
				00684 SBTTSF:: .BLKB	160
				00724 TITMRA:: .LONG	0 0, 450, 0
				00734 .BLKB	450
00000000	000001C2	00000000	00000000	008F6 .BLKB	2
				008F8 SBTMRA:: .LONG	0 0, 450, 0
				00908 .BLKB	450
				00A0A .BLKB	2
				00ACC XTSF:: .BLKB	160
				00B6C KHAR:: .BLKB	4
				00B70 FLGT:: .BLKB	144
				00C00 TTABLE:: .BLKB	168
				00CA8 ATABLE:: .BLKB	256
				00DA8 PDTSTF:: .BLKB	12
				00DB4 SAVE:: .BLKB	80
				00E04 SAVEALL:: .BLKB	44
				00E30 DATTIM:: .BLKB	24
				00E48 HLLIST:: .BLKB	32
				00E68 ECC:: .BLKB	432
				01018 SAVSTK:: .BLKB	876
				01384 TSF:: .BLKB	4
				01388 FNESIZ:: .BLKB	84
				013DC FNISIZ:: .BLKB	84
				01430 FNCT:: .BLKB	48
				01460 GCA:: .BLKB	256
				01560 HCT:: .BLKB	48
				01590 IFSTK:: .BLKB	356
				016F4 FOHLCH:: .BLKB	4
				016F8 FOHRCH:: .BLKB	4
				016FC FOHDD:: .BLKB	4
				01700 FOHLSC:: .BLKB	4
				01704 FOHLSK:: .BLKB	4
				01708 FOHLST:: .BLKB	4
				0170C FOHPDT:: .BLKB	4
				01710 FOHMRA:: .BLKB	4
				01714 FOHTSF:: .BLKB	4

00000000 000001F4 00000000 00000000	01718 FOOREC:::BLKB 0172C FOOMRA:::LONG 0173C .BLKB 01930 FOOIOB:::BLKB 01934 FOTIOB:::BLKB 01938 FO1IOB:::BLKB 01A2C FO2IOB:::BLKB 01B20 FOOPDT:::BLKB 01B2C FOOSCA:::BLKB 01CAC F_LIST:::BLKB 01CC0 F_LCHR:::BLKB 01CCC F_LSKP:::BLKB 01CD8 F_LLCHR:::BLKB 01CE4 F_LRCHR:::BLKB 01CF0 F_LDD:::BLKB 01CFC FOOTSF:::BLKB 01D9C IRAC:::BLKB 01DB8 NPAGEN:::BLKB 01DC8 SPAGER:::BLKB 01E18 TPAGER:::BLKB 01E68 PAGEN:::BLKB 01E78 BRNOOB:::BLKB 01F6C BRNIOB:::BLKB 02060 SCA:::BLKB 021E0 SCALIT:::BLKB 02244 NUMPRM:::BLKB 02254 FS01:::LONG 02264 .BLKB 022FA .BLKB 022FC OUTOPT:::BLKB 02314 FRMSTD:::BLKB 02318 FRMSTK:::BLKB 026D8 HLC:::BLKB 02700 HLDSP:::BLKB 02718 LSTCHR:::BLKB 0271C LSTLCH:::BLKB 02720 LSTRCH:::BLKB 02724 LSTLDD:::BLKB 02728 LSTCNT:::BLKB 0272C LSTSXP:::BLKB 02730 LCHLST:::BLKB 027D0 RCHLST:::BLKB 02870 LDDLST:::BLKB 02910 CHLST:::BLKB 029B0 NMILST:::BLKB 02AF4 PDT:::BLKB 02AF8 PHAN:::BLKB 02B44 SKPLST:::BLKB 02BE4 IOBSTK:::BLKB 0356C RNEIOB:::BLKB 03570 RNAIOB:::BLKB 03574 RNIIIOB:::BLKB 03578 RNOIOB:::BLKB 0357C TTEIOB:::BLKB 03670 TTIIIOB:::BLKB	20 0, 500, 0 500 4 4 244 244 12 384 20 12 12 12 12 160 28 16 80 80 16 244 244 384 100 16 0, 150, 0 150 2 24 4 960 40 24 4 4 4 4 4 160 160 160 160 324 4 76 160 2440 4 4 4 4 244 244
-------------------------------------	--	---

03764	TTOIOB:::BLKB	244
03858	TSIIOB:::BLKB	244
0394C	FFNAME:::BLKB	8
03954	SEMCOD:::BLKB	4
03958	VRCNT:::BLKB	4
0395C	VRNAME:::BLKB	336
03AAC	VRLNG:::BLKB	84
03B00	VRBOOL:::BLKB	84
03B54	VRFFLG:::BLKB	84
03BA8	VRTFLG:::BLKB	84
03BFC	VRSRC:::BLKB	84
03C50	LFFCTX:::BLKB	4
03C54	IPFTYP:::BLKB	4

RINTES==	28
S_FMRA==	500
T_FMRA_SIZE==	500
IPFTCT==	12
IPFTOP==	P.AAA
OPFTOP==	P.AAN
FLTSO==	P.ABA

PSECT SUMMARY

Name	Bytes	Attributes
\$0WNS	48	NOVEC, WRT, RD ,NOEXE,NOSHR, LCL, REL, CON,NOPIC,ALIGN(2)
SGLOBALS\$	15448	NOVEC, WRT, RD ,NOEXE,NOSHR, LCL, REL, CON,NOPIC,ALIGN(2)
SPLITS	256	NOVEC,NOWRT, RD ,NOEXE,NOSHR, LCL, REL, CON,NOPIC,ALIGN(2)
. ABS .	0	NOVEC,NOWRT,NORD ,NOEXE,NOSHR, LCL, ABS, CON,NOPIC,ALIGN(0)

Library Statistics

File	----- Symbols -----	Pages	Processing		
	Total	Loaded	Percent	Mapped	Time
-\$255\$DUA28:[SYSLIB]XPORT.L32:1	590	85	14	252	00:00.1
-\$255\$DUA28:[RUNOFF.SRC]DSRLIB.L32:1	1248	238	19	86	00:00.3

COMMAND QUALIFIERS

BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/LIS=LISS:GLBDAT/OBJ=OBJ\$:GLBDAT MSRC\$:GLBDAT/UPDATE=(ENH\$:GLBDAT)

Size: 0 code + 15752 data bytes
 Run Time: 00:11.7
 Elapsed Time: 00:26.2

GLBDAT
V04-000

Define global literals and data structures
Global storage

F 7
16-Sep-1984 00:41:32 VAX-11 Bliss-32 V4.0-742

Page 15

: Lines/CPU Min: 3416
: Lexemes/CPU-Min: 44583
: Memory Used: 135 pages
: Compilation Complete

GN
V04

0342 AH-BT13A-SE
VAX/VMS V4.0

DIGITAL EQUIPMENT CORPORATION
CONFIDENTIAL AND PROPRIETARY

GETQC
LIS

GNAME
LIS

INDEX
LIS

GETLIN
LIS

GETONE
LIS

LAYOUT
LIS

GTABS
LIS

GLNM
LIS

IFIFNE
LIS

GETOO
LIS

GETQS
LIS

GSLU
LIS

LIT
LIS

GETNUM
LIS

HEADER
LIS

LIST
LIS